

Application No. 10/583182
Response to the Office Action dated December 2, 2008

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A dyeable acrylic shrinkable fiber produced from a spinning solution comprising a polymer composition in which 50 to 99 parts by weight of a polymer (A) comprising 40 to 80 wt % of acrylonitrile, 20 to 60 wt % of a halogen-containing monomer and 0 to 5 wt % of a sulfonic acid-containing monomer is mixed with 1 to 50 parts by weight of a polymer (B) comprising 5 to 70 wt % of acrylonitrile, 20 to 94 wt % of other copolymerizable monomer and ~~[[1]]~~10 to 40 wt % of a sulfonic acid-containing monomer, wherein the polymer (A) and the polymer (B) are incompatible with each other.
2. (Original) The acrylic shrinkable fiber according to claim 1, wherein the total content of the sulfonic acid group-containing monomers in the polymers (A) and (B) is 0.1 to 10 parts by weight based on the total monomer content in the polymers (A) and (B).
3. (Original) The acrylic shrinkable fiber according to claim 1 or 2, wherein the other copolymerizable monomer in the polymer (B) is an acrylic acid ester.
4. (Previously Presented) The acrylic shrinkable fiber according to claims 1 or 2, wherein the spinning solution is phase separated into particles having a particle size of 0.1 to 30 μm .
5. (Currently Amended) The acrylic shrinkable fiber according to claims 1 or 2, having a dyeing shrinkage percentage at 80°C or ~~less~~ lower of 10% or less.

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6. (Currently Amended) The acrylic shrinkable fiber according to claims 1 or 2, having a shrinkage percentage of 20% or more when dyed at 80°C or ~~less~~lower and then treated with dry heat at 130°C for five minutes.

7. (Currently Amended) The acrylic shrinkable fiber according to claims 1 or 2, having a relative saturation value when dyed at 60°C or ~~more~~higher of 0.1 or more and a relative saturation value at 70°C or ~~more~~higher of 0.8 or more.

8. (Currently Amended) A process for producing the acrylic shrinkable fiber according to claims 1 or 2, comprising carrying out relaxation treatment of a drawn yarn of the Polymer (A) and Polymer (B) at 1 to 20% after drawing and before dyeing.

9. (Previously Presented) The acrylic shrinkable fiber according to claim 3, wherein the spinning solution is phase separated into particles having a particle size of 0.1 to 30 µm.

10. (Currently Amended) The acrylic shrinkable fiber according to claim 3, having a dyeing shrinkage percentage at 80°C or ~~less~~lower of 10% or less.

11. (Currently Amended) The acrylic shrinkable fiber according to claim 4, having a dyeing shrinkage percentage at 80°C or ~~less~~lower of 10% or less.

12. (Currently Amended) The acrylic shrinkable fiber according to claim 3, having a shrinkage percentage of 20% or more when dyed at 80°C or ~~less~~lower and then treated with dry heat at 130°C for five minutes.

13. (Currently Amended) The acrylic shrinkable fiber according to claim 4, having a shrinkage percentage of 20% or more when dyed at 80°C or ~~less~~lower and then treated with dry heat at 130°C for five minutes.

14. (Currently Amended) The acrylic shrinkable fiber according to claim 5, having a

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shrinkage percentage of 20% or more when dyed at 80°C or ~~less~~ lower and then treated with dry heat at 130°C for five minutes.

15. (Currently Amended) The acrylic shrinkable fiber according to claim 3, having a relative saturation value when dyed at 60°C or ~~more~~ higher of 0.1 or more and a relative saturation value at 70°C or ~~more~~ higher of 0.8 or more.

16. (Currently Amended) The acrylic shrinkable fiber according to claim 4, having a relative saturation value when dyed at 60°C or ~~more~~ higher of 0.1 or more and a relative saturation value at 70°C or ~~more~~ higher of 0.8 or more.

17. (Currently Amended) The acrylic shrinkable fiber according to claim 5, having a relative saturation value when dyed at 60°C or ~~more~~ higher of 0.1 or more and a relative saturation value at 70°C or ~~more~~ higher of 0.8 or more.

18. (Currently Amended) The acrylic shrinkable fiber according to claim 6, having a relative saturation value when dyed at 60°C or ~~more~~ higher of 0.1 or more and a relative saturation value at 70°C or ~~more~~ higher of 0.8 or more.

19. (New) The acrylic shrinkable fiber according to claim 1, wherein a content of the sulfonic acid-containing monomer in the polymer (B) is 15 to 40 wt %.